November 29, 2012

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATION DEPARTMENT OF TRANSPORTATION RHODE ISLAND CONTRACT NO.2012-CB-078

FEDERAL-AID PROJECT NO. FAP Nos: NHP-0578(002), NHPG-0578(003), NHP-TIGR(001)

New Providence Viaduct Southbound Bridge No. 578

Broadway to Smith Street
CITY/TOWN OF Providence
COUNTY OF PROVIDENCE

NOTICE TO PROSPECTIVE BIDDERS

ADDENDUM NO. 5 Prospective bidders and all concerned are hereby notified of the following changes in the Plans, Specifications, Proposal and Distribution of Quantities for this contract. These changes shall be incorporated in the Plans, Specifications, Proposal and Distribution of Quantities, and shall become an integral part of the Contract Documents.

A. Clarification

1. Modular Joints

A special provision is not required for the modular joints. Notes are provided on the Plans. Deck joints shall be provided and installed as indicated on the Plans.

2. Bearing Loads

The following question was posed by a subcontractor:

As stated in the general notes, this project is to be designed to LRFD Bridge Design Specifications. For the pot bearings to be designed to LRFD specifications, the vertical and horizontal service and strength loads would need to be provided. The Bearing Schedules shown in Volume 2 sheet 68 and Volume 4 sheet 73 only provide vertical strength and horizontal extreme loads. Are the vertical and horizontal service loads available?

RIDOT Answer: The factored vertical loads are based on Strength I limit state as noted on the plans. To obtain service loads, divide the factored loads by the appropriate factors from AASHTO LRFD. The factored lateral loads are based on Extreme I earthquake loads with factor of I as noted on the plans, and therefore the Service Load is the same.

B. Specification Change/Addition

1. Code 802.9901 Temporary Bridge

Delete page JS-236 in its entirety and replace it with revised page JS-236 (R-1) attached to this ADDENDUM NO. 5. The specification has been revised.

2. Code 804.9910 Wick Drains

Delete page JS-271 in its entirety and replace it with revised page JS-271 (R-1) attached to this ADDENDUM NO. 5. The specification has been revised.

3. Code 813.9901 Waterproofing Membrane

Delete page JS-339 in its entirety and replace it with revised page JS-339 (R-1) attached to this ADDENDUM NO. 5. The specification has been revised.

Federal Highway Administration

Division Administrator

RI Department of Transportation

Chief Engineer

ADDENDUM NO. 5 ATTACHMENTS Bridge bearings shall be steel reinforced elastomeric with a Type A Durometer Hardness of 50 and shall conform to the requirements of Section 828, Bridge Bearings.

Prefabricated Modular Steel Truss Bridge and Support Towers:

Prefabricated modular steel truss bridge and support towers shall be provided by one of the following fabricators:

- Acrow Corporation of America 181 New Road
 Parsippany, NJ 07054 (973) 244-0080
 Contact: George Perkins
- Bailey Bridges Inc.
 119 40th St. NE
 Ft. Payne, Al 35967
 (256) 845-7575
 Contact: Skip Wilson
- Mabey Bridge & Shore, Inc. 6770 Dorsey Rd
 Elkridge MD 21075
 (410) 567-1921
 Contact: Kevin Traynor

The prefabricated modular steel truss bridge manufacturer shall be experienced and regularly engaged in the business of manufacturing temporary bridges for at least five (5) years and provide a list of similar construction completed and in service for at least three (3) years.

The prefabricated modular steel truss bridge shall be fabricated by a fabricator who is currently certified by the American Institute of Steel Construction (AISC) to have the personnel, organization, experience, capability, and commitment to produce fabricated structural steel for steel bridges (Sbr) as set forth in the AISC Certification Program.

Prefabricated modular steel truss bridge, support towers, and appurtenances shall meet the loading requirements listed under Construction Methods.

The fabricator shall warranty, materials and workmanship of the prefabricated modular panel bridge, support towers, and appurtenances for a period of three (3) years from when the temporary bridge is open to traffic.

- D. Prior to installing the PV drains, any existing pavement shall be removed and the site shall be graded sufficiently to allow vertical and proper drain installation. This grading work shall be incidental.
- E. The PV drains shall be located, numbered, and staked by the Contractor. The Contractor shall take all reasonable precautions to preserve the stakes and is responsible for any necessary restaking. PV drains shall be installed in a triangular pattern, with a spacing of 5 feet, as shown on the plans. The locations of the PV drains shall not vary by more than 3 inches from the locations indicated on the Plans. PV drains that are out of proper location by more than 3 inches or are damaged or improperly installed will be rejected. Rejected drains may be abandoned in place.
- F. During construction, individual test samples shall be cut from at least one product roll selected at random. Individual samples shall be no less than 10 feet in length and shall be full width. Samples submitted to the Geotechnical Engineer for review shall be accompanied by manufacturer's shipping data indicating the quantity shipped and material specification. In addition the submittal will indicate the linear feet of PV drain represented by the sample. The total length represented by the sample shall not be used until the Geotechnical Engineer has accepted the sample (verified physical dimensions, manufacturer, PV drain designation, and manufacturers' certification of physical and chemical properties).
- G. Should any individual sample selected at random fail to meet any specification requirement, then that roll shall be rejected and two additional samples shall be taken at random from two other rolls representing the shipment. If either of these two additional samples fail to comply with any portion of the specification, then the entire quantity of vertical drain represented by that sample shall be rejected.
- H. In the preparatory stage of installation and prior to the installation of PV drains, the Contractor shall:
 - Remove any surface obstructions present at the location of proposed PV drains,
 - 2. Conduct site stripping, site grading, and special preparation of the existing ground surface, and
 - 3. Provide access to the site for the installation equipment as required.
- I. The Contractor shall be responsible for penetrating overlying material as necessary to satisfactorily install the PV drains including removing obstructions. The Contractor may use augering or other methods to loosen stiff upper soils prior to the installation of the PV drains. Jetting will not be permitted if the procedure results in smearing. All holes or voids created by such operations shall be filled with sand after the PV drain has been satisfactorily installed. The Contractor's obstruction clearance procedure is subject to the review of the Geotechnical Engineer, the QA/QC Inspector and/or Construction QC Representative. However, such review shall not relieve the Contractor of the responsibility to clear obstructions in accordance

CODE 813,9901 WATERPROOFING MEMBRANE

DESCRIPTION: The work under this item shall consist of furnishing and installing a 120 mils (3.0mm) two-coat, methyl-methacrylate, cold spray applied seamless, elastomeric waterproofing membrane system. The waterproofing system shall consist of an MMA primer, the two-coat membrane, and tack coat. The waterproofing system shall be the "Eliminator" by Stirling Lloyd, Newington CT.

A certified field representative of the approved manufacturer is to be present at the work site at all times work is performed under this specification.

MATERIALS:

<u>Primer</u>: The MMA primer/sealer shall be 100% solvent-free reactive methyl-methacrylate based, two-component resin capable of a full cure in 40 minutes at 68°F (20°C).

Membrane: The membrane shall be 100% solvent-free reactive, methyl-methacrylate three component, spray applied material. The 3-component spray-applied membrane shall be comprised of 2 liquid components, A & B, and a hardener powder (benzoyl peroxide, BPO) which is to be added to Component B in accordance with the manufacturer's recommendations.

The membrane shall meet or exceed the following properties as related to laboratory-prepared samples tested at 68°F (20°C) and 24-hour cure where applicable:

PROPERTY	TEST METHOD	UNITS
Gel Time		6-11 minutes
Cure Time		30 minutes
Water Vapor Transmission	ASTM E96-00, Method A	1.048g/m2/day
Adhesion To Concrete	ASTM D4541	100psi min. with failure in the concrete
Tensile Strength	ASTM D638-91 Die C -	
	Typical -Heat Ageing @ 160ºF (4 weeks)	1,700 psi 0% change
Elongation At Break	ASTM D638-91 Die C -	
	Typical -Heat Ageing @ 160 °F (4 weeks)	130% at Break 0% change
Low Temperature Flexibility	CAN CGSB 37.50 M89	Pass ¼ inch Mandrel at -13°F
Dynamic Crack Bridging	ASTM C836-00	Pass @ 10 cycles, 1/8 inch, -15°F

ADDENDUM NO. 5